

- al Conf*
- Cmt B*
- (b) a secondary valve assembly configured to receive input signals from a programmable electronic controller, the secondary valve assembly including:
- (i) a second spool valve configured to operate with the primary valve assembly; and
 - (ii) an actuator for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve assists the braking output produced by the primary valve assembly.

- a2*
3. (Amended) The hydraulic braking system of claim 20, wherein:
- (a) the second spool valve further being constructed and arranged to modulate between the secondary valve assembly second and intermediate positions such that the secondary valve assembly decreases the braking output produced by the primary valve assembly.

- a3 Sub B2*
10. (Amended) An electronically enhanced brake valve for controlling a braking output to a vehicle having at least one wheel, the brake valve comprising:
- (a) a primary valve assembly configured to receive a manually controlled input that varies the braking output, the primary valve assembly including:
 - (i) a first spool valve configured to vary the braking output according to the manually controlled input; and
 - (b) a secondary valve assembly configured to receive input signals from a programmable electronic controller, the secondary valve assembly including:
 - (i) a second spool valve configured to operate with the primary valve assembly; and
 - (ii) a solenoid actuator having a coil and an armature for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve assists the braking output produced by the primary valve assembly.

a4 12. (Amended) The brake valve of claim 21, wherein:

- (a) the second spool valve further being constructed and arranged to modulate between the secondary valve assembly second and intermediate positions such that the secondary valve assembly decreases the braking output produced by the primary valve assembly.

Please add new claims 20-23.

a5 20. (New) A hydraulic braking system for supplying a braking output to a vehicle having at least one wheel, the braking system comprising:

- (a) a primary valve assembly configured to receive a manually controlled input that varies the braking output, the primary valve assembly including:
- (i) a first spool valve configured to vary the braking output according to the manually controlled input, the first spool valve being positionable between a first position, a second position, and intermediate positions between the first and second positions;
 - (1) the first position providing fluid communication between at least one of the wheels and a first pressure source;
 - (2) the second position providing fluid communication between at least one of the wheels and a second pressure source; and
 - (3) the intermediate positions restricting fluid communication between the vehicle wheels and the first and second pressure sources; and
- (b) a secondary valve assembly integral with the primary valve assembly, the secondary valve assembly being configured to receive input signals from a programmable electronic controller, the secondary valve assembly including:
- (i) a second spool valve configured to operate with the primary valve assembly, the second spool valve being positionable between a first position, a second position, and intermediate positions between the first and second positions;
 - (1) the first position providing fluid communication between the primary valve assembly and the first pressure source;

*as
cont*

- (2) the second position providing fluid communication between the primary valve assembly and the second pressure source; and
 - (3) the intermediate position restricting fluid communication between the vehicle wheels and the first and second pressure sources; and
- (ii) an actuator for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve modulates between the secondary valve assembly first and intermediate positions such that the secondary valve assembly pilot assists the primary valve assembly to intensify the braking output provided by the primary valve assembly when the actuator urges the second spool valve to the second position.
21. (New) An electronically enhanced brake valve for controlling a braking output to a vehicle having at least one wheel, the brake valve comprising:
- (a) a primary valve assembly configured to receive a manually controlled input that varies the braking output, the primary valve assembly including:
 - (i) a first spool valve configured to vary the braking output according to the manually controlled input, the first spool valve being positionable between a first position, a second position, and an intermediate position between the first and second positions;
 - (1) the first position providing fluid communication between at least one of the wheels and a first pressure source;
 - (2) the second position providing fluid communication between at least one of the wheels and a second pressure source; and
 - (3) the intermediate position restricting fluid communication between the vehicle wheels and the first and second pressure sources; and
 - (b) a secondary valve assembly integral with the primary valve assembly, the secondary valve assembly being configured to receive input signals from a programmable electronic controller, the secondary valve assembly including:
 - (i) a second spool valve configured to operate with the primary valve assembly, the second spool valve is positionable between a first position, a

*as
cont*

second position, and an intermediate position between the first and second positions;

- (1) the first position providing fluid communication between the primary valve assembly and the first pressure source;
 - (2) the second position providing fluid communication between the primary valve assembly and the second pressure source; and
 - (3) the intermediate position restricting fluid communication between the vehicle wheels and the first and second pressure sources; and
- (ii) a solenoid actuator having a coil and an armature for engaging and actuating the second spool valve according to the input signals received from the programmable electronic controller such that the second spool valve modulates between the secondary valve assembly first and intermediate positions such that the secondary valve assembly pilot assists the primary valve assembly to intensify the braking output provided by the primary valve assembly when the armature urges the second spool valve to the second position.

22. (New) The hydraulic braking system of claim 1, wherein:

- (a) the secondary valve assembly is integral with the primary valve assembly.

23. (New) The brake valve of claim 10, wherein:

- (a) the secondary valve assembly is integral with the primary valve assembly.